

(ii) In any instance where it is impossible for a manufacturer to select basic models for testing in accordance with all of these criteria, the criteria shall be given priority in the order in which they are listed. Within the limits imposed by the criteria, basic models shall be selected randomly.

(2) *ection of units for testing.* For each basic model selected for testing,<sup>2</sup> a sample of units shall be selected at random and tested. The sample shall be comprised of production units of the basic model, or units that are representative of such production units. The sample size shall be not fewer than five units, except that when fewer than five units of a basic model would be produced over a reasonable period of time (approximately 180 days), then each unit shall be tested. In a test of compliance with a represented average or nominal efficiency:

(i) The average full-load efficiency of the sample  $\bar{X}$  which is defined by

$$\bar{X} = \frac{1}{n} \sum_{i=1}^n X_i,$$

where  $X_i$  is the measured full-load efficiency of unit  $i$  and  $n$  is the number of units tested, shall satisfy the condition:

$$\bar{X} \geq \frac{100}{1 + 1.05 \left( \frac{100}{RE} - 1 \right)}$$

where  $RE$  is the represented nominal full-load efficiency, and

(ii) The lowest full-load efficiency in the sample  $X_{\min}$ , which is defined by

$$X_{\min} = \min(X_i)$$

shall satisfy the condition

$$X_{\min} \geq \frac{100}{1 + 1.15 \left( \frac{100}{RE} - 1 \right)}$$

(3) *Substantiation of an alternative efficiency determination method.* The basic

<sup>2</sup>Components of similar design may be substituted without requiring additional testing if the represented measures of energy consumption continue to satisfy the applicable sampling provision.

models tested under § 431.24(a)(3)(i) must be selected for testing in accordance with paragraph (b)(1), and units of each such basic model must be tested in accordance with paragraph (b)(2) by an accredited laboratory that meets the requirements of § 431.25.

#### § 431.25 Testing laboratories.

(a) Testing pursuant to § 431.24(a)(5)(ii) must be conducted in an accredited laboratory for which the accreditation body was:

(1) The National Institute of Standards and Technology/National Voluntary Laboratory Accreditation Program (NIST/NVLAP), or

(2) A laboratory accreditation body having a mutual recognition arrangement with NIST/NVLAP, or

(3) An organization classified by the Department, pursuant to section 431.26, as an accreditation body.

(b) NIST/NVLAP is under the auspices of the National Institute of Standards and Technology (NIST) which is part of the U.S. Department of Commerce. NIST/NVLAP accreditation is granted on the basis of conformance with criteria published in 15 CFR Part 285, *The National Voluntary Laboratory Accreditation Program Procedures and General Requirements*. NIST Handbook 150-10, August 1995, presents the technical requirements of the National Voluntary Laboratory Accreditation Program for the Efficiency of Electric Motors field of accreditation. This handbook supplements NIST Handbook 150, *National Voluntary Laboratory Accreditation Program Procedures and General Requirements*, which contains 15 CFR Part 285 of the U.S. Code of Federal Regulations plus all general NIST/NVLAP procedures, criteria, and policies. Changes in NIST/NVLAP's criteria, procedures, policies, standards or other bases for granting accreditation, occurring subsequent to the initial effective date of 10 CFR part 431 shall not apply to accreditation under this part unless approved in writing by the Department of Energy. Copies of NIST Handbooks 150 and 150-10 and information regarding NIST/NVLAP and its Efficiency of Electric Motors Program (EEM) can be obtained from NIST/NVLAP, 100 Bureau Drive, Mail Stop

## Department of Energy

## § 431.26

2140, Gaithersburg, MD 20899–2140, telephone (301) 975–4016, or telefax (301) 926–2884.

### **§ 431.26 Department of Energy recognition of accreditation bodies.**

(a) *Petition.* To be classified by the Department of Energy as an accreditation body, an organization must submit a petition to the Department requesting such classification, in accordance with paragraph (c) of this section and § 431.28 of this part. The petition must demonstrate that the organization meets the criteria in paragraph (b) of this section.

(b) *Evaluation criteria.* To be classified as an accreditation body by the Department, the organization must meet the following criteria:

(1) It must have satisfactory standards and procedures for conducting and administering an accreditation system and for granting accreditation. This must include provisions for periodic audits to verify that the laboratories receiving its accreditation continue to conform to the criteria by which they were initially accredited, and for withdrawal of accreditation where such conformance does not occur, including failure to provide accurate test results.

(2) It must be independent of electric motor manufacturers, importers, distributors, private labelers or vendors. It cannot be affiliated with, have financial ties with, be controlled by, or be under common control with any such entity.

(3) It must be qualified to perform the accrediting function in a highly competent manner.

(4) It must be expert in the content and application of the test procedures and methodologies in IEEE Standard 112–1996 Test Method B and CSA Standard C390–93 Test Method (1), or similar procedures and methodologies for determining the energy efficiency of electric motors.

(c) *Petition format.* Each petition requesting classification as an accreditation body must contain a narrative statement as to why the organization meets the criteria set forth in paragraph (b) of this section, must be signed on behalf of the organization by an authorized representative, and must be accompanied by documentation that

supports the narrative statement. The following provides additional guidance:

(1) *Standards and procedures.* A copy of the organization's standards and procedures for operating an accreditation system and for granting accreditation should accompany the petition.

(2) *Independent status.* The petitioning organization should identify and describe any relationship, direct or indirect, that it has with an electric motor manufacturer, importer, distributor, private labeler, vendor, trade association or other such entity, as well as any other relationship it believes might appear to create a conflict of interest for it in performing as an accreditation body for electric motor testing laboratories. It should explain why it believes such relationship(s) would not compromise its independence as an accreditation body.

(3) *Qualifications to do accrediting.* Experience in accrediting should be discussed and substantiated by supporting documents. Of particular relevance would be documentary evidence that establishes experience in the application of guidelines contained in the ISO/IEC Guide 58, *Calibration and testing laboratory accreditation systems—General requirements for operation and recognition*, as well as experience in overseeing compliance with the guidelines contained in the ISO/IEC Guide 25, *General Requirements for the Competence of Calibration and Testing Laboratories*.

(4) *Expertise in electric motor test procedures.* The petition should set forth the organization's experience with the test procedures and methodologies in IEEE Standard 112–1996 Test Method B and CSA Standard C390–93 Test Method (1), and with similar procedures and methodologies. This part of the petition should include description of prior projects, qualifications of staff members, and the like. Of particular relevance would be documentary evidence that establishes experience in applying the guidelines contained in the ISO/IEC Guide 25, *General Requirements for the Competence of Calibration and Testing Laboratories*, to energy efficiency testing for electric motors.

(d) *Disposition.* The Department will evaluate the petition in accordance with section 431.28, and will determine